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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,737	11/29/2000	Peter Joseph Giacomini	500-002US	9624
22897	7590	08/01/2005	EXAMINER	
DEMONT & BREYER, LLC SUITE 250 100 COMMONS WAY HOLMDEL, NJ . 07733			VU, THONG H	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/725,737

Applicant(s)

GIACOMINI ET AL.

Examiner

Thong H. Vu

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**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. Claims 1-32 are pending.
2. The copending information is recorded.
3. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

4. Claims 1,8,15,24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention (i.e.: it was unclear How and When occasionally or under What condition the integer will be greater than one). Examiner considers the occasionally requests greater than one as either one request or two requests.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-32 are rejected under 35 U.S.C. § 102(e) as being anticipated by Mulla et al [Mulla, 6,427,189 B1].

5. As per claim 8, Mulla discloses a data processing system comprising:

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a cache for storing a resource [Mulla, information stored in the cache, col 6 line 47-48]; and

a processor for populating said cache with said resource [Mulla, CPU issues an integer load type instruction, col 7 lines 52] only when at least  $i$  requests for said resource have been received; wherein  $i$  is an integer is an at least occasionally greater than one [Mulla, cache may supply up two integer per clock, col 6 line 58; each request may require one or two port, col 15 lines 22-26; col 16 lines 51-55].

6. As per claims 2,9,16,25 Mulla discloses the value of  $i$  is invariant [Mulla, cache may supply up two integer per clock, col 6 line 58].

7. As per claims 3,10,17,26 Mulla discloses the value of  $i$  is based on calendrical time as inherent feature of system clock [Mulla, cache may supply up two integer per clock, col 6 line 58].

8. As per claims 4,11,18,27 Mulla discloses said cache is populated with said resource only when at least  $i$  requests for said resource have been received within an elapsed time interval as inherent feature of system clock [Mulla, cache may supply up two integer per clock, col 6 line 58]

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9. As per claims 5,12,19,28 Mulla discloses the duration of said elapsed time interval,  $At$ , is based on the value of  $i$  as inherent feature of system clock [Mulla, cache may supply up two integer per clock, col 6 line 58].

10. As per claims 6,13,20,29 Mulla discloses the value of  $i$  is based on calendrical time as inherent feature of system clock [Mulla, cache may supply up two integer per clock, col 6 line 58].

11. As per claims 7,14,21,30 Mulla discloses the duration of said elapsed time interval,  $At$ , is based on calendrical time as inherent feature of system clock [Mulla, cache may supply up two integer per clock, col 6 line 58].

12. Claims 1,15,24 contain the similar limitations set forth of apparatus claim 8. Therefore, claims 1,15,24 are rejected for the similar rationale set forth in claim 8.

13. As per claims 22,31 Mulla discloses said computer network is a hierarchical computer network and said first node has  $m$  filial nodes; wherein said cache is populated with said resource only when at least one request for said resource has been received from at least  $n$  of said  $m$  filial nodes; and wherein  $m$  is an integer greater than one,  $n$  is an integer greater than one, and  $m \geq n$  [Mulla, each request may require one or two port, col 15 lines 22-26;col 16 lines 51-55].

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14. As per claim 23,32 Mulla discloses said computer network is a hierarchical computer network and said first node has m filial nodes; wherein said cache is populated with said resource only when at least one request for said resource has been received from at least n of said m filial nodes within an elapsed time interval,  $A_t$ ; and wherein m is an integer greater than one, n is an integer greater than one, and  $m \geq n$  [Mulla, each request may require one or two port, col 15 lines 22-26;col 16 lines 51-55].

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-32 are rejected under 35 U.S.C. § 102(e) as being anticipated by Fuoco et al [Fuoco, 6,408,345 B1].

15. As per claim 8, Fuoco discloses a data processing system comprising:  
a cache for storing a resource [Fuoco, level one and two instruction cache, col 3 lines 43-60]; and a processor for populating said cache with said resource only when at least i requests for said resource have been received; [Fuoco, CPU 110, Fig 1]; wherein i is an integer and is at least occasionally greater than one [Fuoco, an integer logic unit,

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an integer multiplier, col 3 lines 30-42; multiple request in the same cycle, col 8 lines 1-7]

16. As per claims 2,9,16,25 Fuoco discloses the value of  $i$  is invariant [Fuoco, multiple request in the same cycle, col 8 lines 1-7].

17. As per claims 3,10,17,26 Fuoco discloses the value of  $i$  is based on calendrical time [Fuoco, multiple request in the same cycle, col 8 lines 1-7; programmable timers, col 10 line 39].

18. As per claims 4,11,18,27 Fuoco discloses said cache is populated with said resource only when at least  $i$  requests for said resource have been received within an elapsed time interval [Fuoco, multiple request in the same cycle, col 8 lines 1-7; programmable timers, col 10 line 39]

19. As per claims 5,12,19,28 Fuoco discloses the duration of said elapsed time interval,  $At$ , is based on the value of  $i$  [Fuoco, multiple request in the same cycle, col 8 lines 1-7].

20. As per claims 6,13,20,29 Fuoco discloses the value of  $i$  is based on calendrical time [Fuoco, multiple request in the same cycle, col 8 lines 1-7; programmable timers, col 10 line 39].

21. As per claims 7,14,21,30 Fuoco discloses the duration of said elapsed time interval,  $A_t$ , is based on calendrical time [Fuoco, multiple request in the same cycle, col 8 lines 1-7; programmable timers, col 10 line 39].

22. Claims 1,15,24 contain the similar limitations set forth of apparatus claim 8. Therefore, claims 1,15,24 are rejected for the similar rationale set forth in claim 8.

23. As per claims 22,31 Fuoco discloses said computer network is a hierarchical computer network and said first node has  $m$  filial nodes (i.e.: ports) ; wherein said cache is populated with said resource only when at least one request for said resource has been received from at least  $n$  of said  $m$  filial nodes; and wherein  $m$  is an integer greater than one,  $n$  is an integer greater than one, and  $m \geq n$  [Fuoco, an integer logic unit, an integer multiplier, col 3 lines 30-42; multiple request in the same cycle, col 8 lines 1-7; ports, Fig 3].

24. As per claim 23,32 Fuoco discloses said computer network is a hierarchical computer network and said first node has  $m$  filial nodes; wherein said cache is populated with said resource only when at least one request for said resource has been received from at least  $n$  of said  $m$  filial nodes within an elapsed time interval,  $A_t$ ; and wherein  $m$  is an integer greater than one,  $n$  is an integer greater than one, and  $m \geq n$



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[Fuoco, an integer logic unit, an integer multiplier, col 3 lines 30-42; multiple request in the same cycle, col 8 lines 1-7].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***Thong Vu***  
***Patent Examiner***  
***Art Unit 2142***

A handwritten signature in black ink, appearing to read 'Thong', with a horizontal line underneath.